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EXAMINER	
PARK, CHAN S	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/691,332	HOUSEL, EDWARD M.	
	Examiner	Art Unit	
	CHAN S. PARK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 March 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 12/08/04, and has been entered and made of record. Currently, **claims 1-16** are pending.

Drawings

2. The corrected or substitute drawings were received on 3/25/05. However, the drawings are not acceptable.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs/numbers for the "trimming device" and the "instruction sheet" in fig. 1 of the Replacement Sheet. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The Office kindly requests the applicant to amend the Specification describing the trimming device and the instruction sheet of fig. 1 without introducing new matters.

Response to Arguments

5. Upon review of the reference of Muramatsu et al. U.S. Patent No. 5,461,459 (hereinafter Muramatsu), the examiner notes that the reference can still be interpreted to maintain the rejection of **claims 1-10**, as currently amended.

Particularly, as amended, claim 1 now requires "automatically enabling the printer to print full-bleed". It is respectfully noted that a conventional printer automatically initiates a print engine to print a print job based on the instructions or set up information setup by a user. It is apparent to one of ordinary skill in the art that a conventional printer is a computerized system. Thus, when "full bleed" is setup to print to the very edge of the paper medium, this process is automatically processed by the print engine in the printer (page 2, lines 25-26 of the Specification). Although the actual process performed by the current invention might be different from the teaching of Muramatsu, this difference is not apparent in the current claim wording. Furthermore, it is respectfully noted that it would have been obvious to one of ordinary skill in the art to combine the full bleed printing method of the Admitted prior art, wherein on pages 1-4 of the Background of the Specification, with the printer of Muramatsu. The suggestion/motivation for doing so would have been to enable the printer of Muramatsu to print in a "full bleed" setting as it is disclosed in the Admitted prior art. Since setting

up of "full bleed" printing is taught in the Admitted prior art, Examiner believes a proper prima facie case of obviousness is established.

Therefore, the rejection of **claims 1-10** is maintained and repeated in this Office Action.

6. Moreover, the Applicant's arguments with respect to **claims 1-16** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 7, 8, 15 and 16, as currently amended, are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims fail to correspond in scope with that which applicant regards as the invention can be found in the Specification filed 10/18/00. In that paper, applicant has stated "[t]he operator of the trimming device may refer to the instruction sheet when setting up the trimming device" (page 7, lines 7-8 & 25-26), and this statement indicates that the invention is different from what is defined in the claims because the operator at the trimming device does not appear to be involved in the trimming process. Does the trimming device automatically detect the sheet and trim the print job accordingly? If yes, Examiner respectfully requests the applicant to provide

supporting evidences describing such a process from either the Specification or the Drawings.

8. Examiner kindly suggests the applicant to amend the claims to include "an operator at the trimming device" for setting up the trimming device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu in view of Applicant's Admitted Prior Art in the Background of the Specification pages 1-4 (hereinafter Admitted prior art).

9. With respect to claim 1, Muramatsu teaches a method of automatically laying out a print job for printing on a printer having a plurality of available media sizes, wherein the print job includes a designated print area, defined by the designated length and width of the finished printed output, the method comprising the steps of:

setting up the print job, the print job comprising data denoting the length and width of the finished output (length and width calculated and set up by CPU in fig. 16);

determining whether the print area is smaller than an available media size (col. 11, lines 26-41 and fig. 23);

determining whether the print area must be rotated to fit the print area on an available media size (col. 11, lines 26-41 and fig. 23);

automatically selecting a media size from the available media (col. 8, lines 43-45);

automatically calculating the distance and direction the print area must be shifted to locate the print area on the media in such a manner as to optimize the image location on the media (col. 7, lines 38-48 & col. 13, lines 63-67);

printing the print job with the calculated image area shift and image area rotation (col. 5, lines 3-7).

It is apparent to one of ordinary skill in the art that the media size and the rotating value are determined by the determination steps of (b) and (c).

Muramatsu does not teach a method of automatically enabling the printer to print full-bleed.

Admitted prior art teaches a method for setting up a print job, the print job comprising data denoting the length and width of the finished output (requesting to print on odd-size media in page 2, line 3) and a method of automatically enabling the printer or copier to print full-bleed (page 1, line 20 & page 2, lines 25-26).

Muramatsu and Admitted prior art analogous art because they are from the same field of endeavor, that is the printing and copying art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the copier of Muramatsu to print full-bleed on a selected paper size.

The suggestion/motivation for the modification would have been to provide a full-bleed copier or printer that can automatically select a correct paper size and calculate the rotation and shift values. By doing so, it would have further fit the print area optically and reduced the burden for a user to manually input the rotation and shift values.

Therefore, it would have been obvious to combine Muramatsu with Admitted prior art to obtain the invention as specified in claim 1.

10. With respect to claim 2, Muramatsu teaches that the printed output is single-sided (fig. 2).

11. With respect to claim 3, Muramatsu teaches that the printed output is double-sided (fig. 2).

12. With respect to claim 4, the combination of Muramatsu and Admitted prior art teaches the method of claim 1, wherein Admitted prior art further teaches that the printer is capable of full-bleed printing on four edges of the media (page 1, lines 19-20).

13. With respect to claim 5, the combination of Muramatsu and Admitted prior art teaches the method of claim 1, wherein Muramatsu teaches a method of shifting the print area to leave a margin for the binding (figs. 3 & 4). Since Admitted prior art teaches the method of printing an entire page with no unprinted margins, at the time of the invention, one would have been motivated to incorporate the shifting method of Muramatsu to leave a binding area for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Admitted prior art teaches the invention as specified in claim 5.

14. With respect to claim 6, the combination of Muramatsu and Admitted prior art teaches the method of claim 3, wherein Muramatsu teaches that the printer margin is on the leading edge (option of choosing the binding direction in figs. 3 & 4).

15. With respect to claim 9, the combination of Muramatsu and Admitted prior art teaches the method of claim 5, wherein Admitted prior art teaches that the printed output is single-sided (fig. 2). Since Admitted prior art teaches the method of printing an entire page with no unprinted margins, at the time of the invention, one would have been motivated to incorporate the single-sided margin shifting method of Muramatsu to leave a binding area on single-side printed page for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Admitted prior art teaches the invention as specified in claim 9.

16. With respect to claim 10, the combination of Muramatsu and Admitted prior art teaches the method of claim 5, wherein Admitted prior art teaches that the printed output is double-sided (fig. 2). Since Admitted prior art teaches the method of printing an entire page with no unprinted margins, at the time of the invention, one would have been motivated to incorporate the double-sided margin shifting method of Muramatsu to leave a binding area on double-side printed page for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Admitted prior art teaches the invention as specified in claim 10.

Claims 1-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu in view of Silverbrook PCT Pub No. WO96/32725.

17. With respect to claim 1, Muramatsu teaches a method of automatically laying out a print job for printing on a printer having a plurality of available media sizes, wherein the print job includes a designated print area, defined by the designated length and width of the finished printed output, the method comprising the steps of:

setting up the print job, the print job comprising data denoting the length and width of the finished output (length and width calculated and set up by CPU in fig. 16);

determining whether the print area is smaller than an available media size (col. 11, lines 26-41 and fig. 23);

determining whether the print area must be rotated to fit the print area on an available media size (col. 11, lines 26-41 and fig. 23);

automatically selecting a media size from the available media (col. 8, lines 43-45);

automatically calculating the distance and direction the print area must be shifted to locate the print area on the media in such a manner as to optimize the image location on the media (col. 7, lines 38-48 & col. 13, lines 63-67);

printing the print job with the calculated image area shift and image area rotation (col. 5, lines 3-7).

It is apparent to one of ordinary skill in the art that the media size and the rotating value are determined by the determination steps of (b) and (c).

Muramatsu does not teach a method of automatically enabling the printer to print full-bleed.

Silverbrook, the same field of endeavor of the printing art, teaches the method of automatically enabling a printer to print full-bleed ('(2) Print area' paragraph on page 28) based on the specified constants or parameter.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the copier of Muramatsu to print full-bleed on a selected paper size.

The suggestion/motivation for doing so would have been to enable the printer of Muramatsu to print in a "full bleed" setting.

Therefore, it would have been obvious to combine Muramatsu with Silverbrook to obtain the invention as specified in claim 1.

18. With respect to claim 2, Muramatsu teaches that the printed output is single-sided (fig. 2).

19. With respect to claim 3, Muramatsu teaches that the printed output is double-sided (fig. 2).

20. With respect to claim 4, Silverbrook teaches the method wherein the printer is capable of full-bleed printing on four edges of the media ('(2) Print area' paragraph on page 28).

21. With respect to claim 5, the combination of Muramatsu and Silverbrook teaches the method wherein the printer is capable of full-bleed printing on three edges and requires a printer margin on one edge of the media (accommodating non-printing margins of Silverbrook), and the printer margin is automatically accounted for in determining the appropriate print area shift and print area rotation. Since Silverbrook

teaches the method of allowing full-bleed printing wherein the print area can be set to accommodate non-printing margins, at the time of the invention, one would have been motivated to incorporate the shifting method of Muramatsu to leave a binding area for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Silverbrook teaches the invention as specified in claim 5.

22. With respect to claim 6, the combination of Muramatsu and Silverbrook teaches the method of claim 3, wherein Muramatsu teaches that the printer margin is on the leading edge (option of choosing the binding direction in figs. 3 & 4).

23. With respect to claim 9, the combination of Muramatsu and Silverbrook teaches the method of claim 5, wherein Muramatsu teaches that the printed output is single-sided (fig. 2). Since Silverbrook teaches the method of allowing full-bleed printing wherein the print area can be set to accommodate non-printing margins, at the time of the invention, one would have been motivated to incorporate the single-sided margin shifting method of Muramatsu to leave a binding area on single-side printed page for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Silverbrook teaches the invention as specified in claim 9.

24. With respect to claim 10, the combination of Muramatsu and Silverbrook teaches the method of claim 5, wherein Muramatsu teaches that the printed output is double-sided (fig. 2). Since Silverbrook teaches the method of allowing full-bleed printing wherein the print area can be set to accommodate non-printing margins, at the time of the invention, at the time of the invention, one would have been motivated to incorporate the double-sided margin shifting method of Muramatsu to leave a binding

area on double-side printed page for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Silverbrook teaches the invention as specified in claim 10.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Muramatsu and Silverbrook as applied to claim 1 above, and further in view of Applicant's Admitted Prior Art in the Background of the Specification pages 1-4 (hereinafter Admitted prior art).

25. With respect to claim 7, the combination teaches the method of claim 1, but it does not teach expressly the step of printing an instruction sheet accompanying the print job that comprises trimming instructions for setting up a post-printing trimming device.

Admitted prior art, the same field of endeavor of image processing the print job, teaches the step of printing (writing down) an instruction sheet accompanying the print job that comprises instructions for setting up a post-printing trimming device (page 2, lines 16-19). Since it is well know to one of ordinary skill in the art that the printer can print any data inputted by the user, instead of manually writing down the instruction, one would have been motivated to print the instructions and notify/inform the person performing the trimming with the correct/proper trimming instruction to produce a proper/correct trimming function.

Therefore, it would have been obvious to combine the three references to obtain the invention as specified in claim 7.

26. With respect to claim 8, Admitted prior art further teaches the step wherein the trimming instructions are sent to the trimming device connected to the printer (page 2, lines 16-19).

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu in view of Silverbrook, and further in view of Shimizu U.S. Patent No. 5,040,0779.

27. With respect to claim 11, Muramatsu teaches a method of automatically laying out a print job for printing on a printer having a plurality of available media sizes, wherein the print job includes a designated print area, defined by the designated length and width of the finished printed output, the method comprising the steps of:

a. setting up the print job, the print job comprising data denoting the length and width of the finished output (length and width calculated and set up by CPU in fig. 16);

b. determining whether the length of the print area is smaller than a leading edge of an available media size and that the width of the print area is smaller than a lateral edge of an available media size (col. 11, lines 26-41 and fig. 23);

c. determining whether the length of the print area is smaller than the lateral edge of an available media size and whether the width of the print area is smaller than the trailing edge of an available media size (col. 11, lines 26-41 and fig. 23);

d. determining whether the print area must be rotated to fit the print area on an available media size (col. 11, lines 26-41 and fig. 23);

e. automatically selecting a media size from the available media (col. 8, lines 43-45);

f. automatically calculating the distance and direction the print area must be shifted to locate the print area on the media in such a manner as to optimize the image location on the selected media (col. 7, lines 38-48 & col. 13, lines 63-67);

g. printing the print job with the calculated image area shift and image area rotation (col. 5, lines 3-7).

It is apparent to one of ordinary skill in the art that the media size and the rotating value are determined by the determination steps of (b) and (c).

Muramatsu does not teach a method of enabling the printer to print full-bleed.

Silverbrook, the same field of endeavor of the printing art, teaches the method of automatically enabling a printer to print full-bleed ('(2) Print area' paragraph on page 28) based on the specified constants or parameter.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the copier of Muramatsu to print full-bleed on a selected paper size.

The suggestion/motivation for doing so would have been to enable the printer of Muramatsu to print in a "full bleed" setting.

The combination of Muramatsu and Silverbrook does not teach that the method of automatically laying out a print job is for minimizing post-print trimming.

Shimizu, the same field of endeavor of image processing a print job, teach the method of calculating the distance and direction the print area must be shifted to locate

the print area on the media to optimize the image location for minimizing the post-print trimming (fig. 15 and col. 14, lines 1-38).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the automatic shifting method of Shimizu into the printer of Muramatsu.

The suggestion/motivation for doing so would have been to correctly shift image for the trimming process.

Therefore, it would have been obvious to combine the three references to obtain the invention as specified in claim 11.

28. With respect to claim 12, Silverbrook teaches the method wherein the printer is capable of full-bleed printing on four edges of the media ('(2) Print area' paragraph on page 28).

29. With respect to claim 13, the combination of Muramatsu and Silverbrook teaches the method wherein the printer is capable of full-bleed printing on three edges and requires a printer margin on one edge of the media (accommodating non-printing margins of Silverbrook), and the printer margin is automatically accounted for in determining the appropriate print area shift and print area rotation. Since Silverbrook teaches the method of allowing full-bleed printing wherein the print area can be set to accommodate non-printing margins, at the time of the invention, one would have been motivated to incorporate the shifting method of Muramatsu to leave a binding area for the binding in the full-bleed printed page. Thus, the combination of the combination of Muramatsu and Silverbrook teaches the invention as specified in claim 5.

30. With respect to claim 14, the combination of Muramatsu and Silverbrook teaches the method of claim 13, wherein Muramatsu teaches that the printer margin is on the leading edge (option of choosing the binding direction in figs. 3 & 4).

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claim 11 above, and further in view of Admitted prior art.

31. With respect to claim 15, arguments analogous to those presented for claim 7, are applicable.

32. With respect to claim 16, arguments analogous to those presented for claim , are applicable.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2622

csp
June 24, 2005

EDWARD COLES
SUPERVISORY PATENT EXAMINER
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